BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

Name of work:-Maintenance of power pumps in ward no-03 — **Estimate Cost Rs. 20.00 Lakhs**

Sl No.	Description of item	Unit	No	L	B	D	Qty	Rate	Amount
1	Lifting of Submersible pump set **(P.40/I.13) PRED SR (2013-14) P-56 I.No 3.21**	No.	25				25	850.00	21250.00
2	Transportation of pumping machineries PRED SR For 2012-13 **(P.41/I.14)PRED SR (2013-14) P.No 56 Item No 10-3-19**	No.	25				25	900.00	22500.00
3	**A) Repairs to Motor:** Rewinding of submersible pump sets with copper insulation wire of suitable gauge as per ISI specification with guarantee of 6 months. **PRED SR (2013-14) P No. 54/ I. No. A) (Above 5 HP upto 10HP add Rs.120/- for every ½ HP)**								
	B) 10 HP Motor	No.	25				25	3700.00	92500.00
	upto 5 HP 2500.00								
	for 10 HP (120 x 10) 1200.00								
	Total 3700								
	111.00								
	3811.00								
	B) Replacement of Motor Parts:								
4	Stator (with one year Guarantee) **P No. 55/ I No. C(1) PRED SR (2012-13) 10.3.3**	No.	60				60	5050.00	303000.00
5	Rotor (with one year Guarantee) **P No. 55/ I No. C(2) PRED SR (2013-14) 10.3.6**	No.	20				20	4700.00	94000.00
6	Upper Flange **P. No. 40 / I No. 10.3.7 PRED SR (2013-14)**	No.	40				40	350.00	14000.00
7	Lower Housing **P. No. 55 / I No.10.3.10PRED SR (2013-14)**	No.	40				40	650.00	26000.00
8	Lower flange **P. No. 40 / I No.5 PRED SR (2008-09)**	No.	40				40	350.00	14000.00
9	a) Carbon Housing **P. No. 56 / I No.10.3.12 PRED SR (2012-13)**	No.	40				40	475.00	19000.00
10	b) Thrust bearing block assembly complete with Segment bearing pad.**P. No. 40 / I No10.3.13PRED SR (2012-13**	No.	40				40	1150.00	46000.00
11	c)Top Carbon /Ferrodo padding **P. No. 56 / I No. PRED SR (2012-13)**	No.	60				60	150.00	9000.00
12	Bearing (GunMetal) Centrifugal cast Aluminium Bronze, bearing bush. **P. No. 56/ I No10.3.16 PRED SR (2013-14)**	No.	60				60	400.00	24000.00
13	Motor Base with pin **P. No. 56 / I No.10.3.18 PRED SR (2013-14)**	No.	20				20	470.00	9400.00
14	Re-erection charges of pumping machineries including overhauling and painting **P. No. 56 / I No.50 PRED SR (2013-14)**	No.	40				40	950.00	38000.00
15	Labour charges (overhauling only) **P. No. 55/ I No.10.3.22 PRED SR (2012-13)**	No.	40				40	550.00	22000.00

	C) **Replacement of pump parts:** The following main components of submersible pump sets requiring replacement.								
16	Pump Bowls **P. No. 54 / I No.10.2.1 PRED SR (2013-14**	No.	40				40	700.00	28000.00
17	Intermediate piece (I.P) with IP leaded bronze bush **P. No. 54 / I No10.2.2 PRED SR (2012-13)**	No.	40				40	450.00	18000.00
18	Oil Seal **P. No. 39 / I No.B3 PRED SR (2008-09)**	No.	40				40	125.00	5000.00
19	Oil Seal Steel Bush **P. No. 54/ I No.10.24 PRED SR (2012-13)**	No.	40				40	150.00	6000.00
20	Guide vane **P. No. 54 / I No.10.2.5 PRED SR (2012-13)**	No.	40				40	175.00	7000.00
21	Impeller (Shell moulded with aluminium and Bronze) **P. No. 54/ I No.10.2.70 PRED SR (2012-13)**	No.	40				40	425.00	17000.00
22	a) Discharge outlet (D.O) Bearing D.O Steel Bush **P. No.54 / I No.10.2.70 RDED SR (2012-13)**	No.	40				40	445.00	17800.00
23	b) D.O Bearing **P. No. 54 / I No.10.2.8 PRED SR (2012-13)**	No.	40				40	285.00	11400.00
24	Steel Bush (D.O.Steel bush) **P. No. 54 / I No.A710.2.9 PRED SR (2012-13)**	No.	40				40	150.00	6000.00
25	Allen Screw **P. No. 55 / I No.8 PRED SR (2012-13)**	No.	40				40	25.00	1000.00
26	Pump shaft made out of stainless steel Centreless ground with key way (upto 8 stages) **P. No. 55/ I No.10.2.11 PRED SR (2013-14))**	No.	40				40	950.00	38000.00
27	Pump key (Stainless steel) **P. No. 55 / I No.10.2.12 PRED SR (2012-13))**	No.	40				40	125.00	5000.00
28	Pump Coupling (Stainless steel) **P. No. 55/ I No.10.2.13PRED SR (2012-13)**	No.	40				40	250.00	10000.00
29	Non – return valve (NRV) assembly complete with rubber 'O' Ring **P. No. 55 / I No.10.2.14PRED SR (2012-13)**	No.	60				60	1350.00	81000.00
30	Cable Guard **P. No.55 / I No.10.2.15 PRED SR (2012-13)**	No.	120				120	150.00	18000.00
31	Strainer **P. No. 55 / I No.10.2.16 PRED SR (2012-13)**	No.	60				60	150.00	9000.00
32	Brass Filter **P. No. 55 / I No.10.2.17) PRED SR (2012-13)**	No.	60				60	250.00	15000.00
33	Supplying and fixing miniature circuit breakers/solaters on existing MCB distribution boards using necessary fixing materiasl wiring complete as requireds 5 to 30 amps triple pole with all lead and lift, loading, unloading and labour charges etc complete as per specifications	No.	10				10	1000.00	10000.00

34	Supplying, fixing, wiring, earth electrode for grounding conduits, I.C cutouts and other equipments on the meter board using 40 mm dia 2.90 mm thick GI pipe 2.5 m long buried in a pit. The pit should be filled with equal propotion of solt and charocoal 150 mm alround the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size, as per ISI specification 7.3.3 IS 732 using 12 mm dia bolts, nuts, washers and check nuts, etc., the pipe shall have 16 throught holes of 122 mm dia, (PWD Electrical SR-1999-2000, P-66, I.No.7) KPWD Electrical SR 2007-08	No.	8				8	1950.00	15600.00
35	Supplying of ISI marked galvanized mild steel tube (continously welded electric resistance welded (ERW) high frequency, induction welded (HFIW) Hot finished welded type of nominal bore given below screwed at both ends as per IS 554/1986 with latest amendments, pipes threaftes at one end and the other end protected asper specification in random lengths of 4 to 7 mtrs Confirming to IS 1239 part I/1990 with amendament 1-5 and with all its latest amendements if any. The pipes supplied should be with BIS mark No 3/08-09 2406/15.10.2008. 50 mm dia including Collar Heavy Class 2015-16, P-90, i.no13.15	No.	1	600.00			600	431.00	258600.00
36	GI Collers	No.	500				500	100.00	50000.00
37	Supplying and drawing 3 core flat PVC sheathed submersible pump cable manufactured with electrolytic grade copper with flexible copper conductor confirming to table 3 class 5 of IS:8130-1984 and virgin grade PVC insulation and sheathed suitable for working voltage upto 1100 Volts. P. No. 46/ I No. 30-B 4.0 Sqm mm of 36 strands 0.3mm dia Group - A KPWD Electrical SR 2007-08 3/2008-09 4538/19.01.2009 (1x3x4.00 Sqmm PVC cable)	mtr	2	600.00			1200	151.00	181200.00
	E) General Items								
33	KSRB 2-2.2 : Earth work excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in **hard soil** not exceeding 1.5m , in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50m. specification, specification. No. KBS 2.1(b) / 2.3.5, **No. 5/ Item No. 2.4/ PWD SR 2016-17**	Cum							

			1	1000.00	0.60	0.80	480.00		
							480.00	299.98	143990.40
	Basic Rate	283.00							
	Area Weightage @ 6%	16.98							
	Total	299.98							
34	Providing and instalation at site of works P.V.C. Pipes including cost of pipes and specials and incluidng lowring into trenches, laying true to line, level and perfect linking at joints, leak proof including jointing encasing the pipe alround to a depth Not less than 15cm with grave or selected earth avalabile from the execavation Etc., Page No.3 item No.4.2 **PRE SR 2016-17**	Rmtr							
	75mm Dia 6 KSC		1	1000.00			1000.00	161.71	161710.00
35	KSRB 2-4 : Refilling available earth around pipe lines, cables in layers not exceeding 20cms in depth, compacting each deposited layer by ramming after watering with lead upto 50mm, and lift upto 1.5m, including cost of all labour complete as per specifications, **No. 6/ Item No. 2.11/ PWD SR 2015-16**	Cum							
			Qty. Vide Item No. 33				480.00	76.32	36633.60
	Basic Rate	72.00							
	Area Weightage @ 6%	4.32							
	Total	76.32							
36	KSRB 13.6.3-6 : Providing and fixing in position brass gate valve with C.I wheel of approved quality (screwed end) **50mm** nominal bore including cost of all materials, labour and HOM of equipments with all leads complete as per specifications. Specification No. KBS 13.2.6/13.3 (P.89/I.13.37 **PWD SR - 2016-17)**	Each							
			38				38	2175.12	82654.56
	Basic Rate	2052.00							
	Add Area Weightage @ 6%	123.12							
	Total	2175.12							
37	Labour charges for attending to repairs of the P.V.C pipes by earth work excavation, cutting the old pipe, installation and jointing of new pipes to the existing old pipe to the depth, line and level, perfect linking at joints including encasing the pipes alround to a depth of not less than 15 cm with earth available and refilling the excavated trenches giving satisfactory hydraulic test et., complete (Excluding the cost of materials) **(P.6/I.9**	Each							
			76				76	150.38	11428.88

38	Miscellaneous and Unforeseen Charges								
									332.56
								Total	**2000000.00**

(Rupees Twenty Lakhs Only)

CERTIFICATE

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per C.S.R. of PWD 2016-17PWD Elecrical 2016-17, PRED 2016 -17& RDED SR 2014-15 & SE
3 The provisions were made in this estimate are necessary and adequate.
4 This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Yelahanka Sattellite Sub Division
Bangalore.

Administrative Approval
Accorded For 20.00 lakhRs.
Head of A/C P1771
CER NO : 200 Dt: 16.02.17

TA CE (YNK)

TECHNICALLY SANCTIONED FOR Rs. 20.00
Rupees Twenty lakh only
Under P. 1802-2016-17
Registered as CE ( ) No 9
Subject to conditions contained in enclosed memo ES ( ) No /9/
Dt Sanctioned
EE/TS/92/16-17
Dated 16-2-2017 Rs. 20.00h
Executive Engineer